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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,722	10/08/1999	TOMOYUKI NONOMURA	01489/P-2121	3771

7590

08/11/2003

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WASHINGTON, DC 20006

EXAMINER

LANIER, BENJAMIN E

ART UNIT	PAPER NUMBER
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2132

10

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/414,722

Applicant(s)

NONOMURA ET AL.

Examiner

Benjamin E Lanier

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 6, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenberg, U.S. Patent No. 5,379,345. Referring to claims 1, 3, 6, 7, Greenberg discloses a method of encoding, using an encoder and station recorder (Fig. 2, Col. 3, line 51- Col. 4, line 5, stream writing unit) an audio broadcast wherein an audio data stream containing segment identification data (ID flag) is combined with a program segment (scrambling key) to which it relates in a manner in which the data is inaudible on conventional reception apparatus (scrambled) and which does not significantly degrade the audio quality of the program segment (watermark). A reception facility (stream reading unit) is provided to extract the data stream from the recorded audio and compare the stream with reference data for the transmission, including length and time of the segment. Comparison can verify the broadcast (Abstract, Col. 2, lines 37-55). The combination step is done through an inverse conversion method (Col. 4, line 28 – Col. 5, line 7). Greenberg also discloses a recording and storage apparatus (stream storage unit) for the audio stream (Col. 2, lines 44-46).

Referring to claim 4, Greenberg discloses that after decoding (decompressing), wherein the added data is extracted from the composite signal, the data is passed to a data processing

Art Unit: 2132

station, where analysis of the data is performed. Such a station may be at the site of receiver or may constitute a remote facility (Col. 3, lines 26-42).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 5, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg, U.S. Patent No. 5,379,345, in view of Tewfik, U.S. Patent No. 6,061,793. Referring to claims 2, 5, 8, Greenberg discloses a method of encoding an audio broadcast wherein an audio data stream containing segment identification data (ID flag) is combined with a program segment to which it relates in a manner in which the data is inaudible on conventional reception apparatus (scrambled) and which does not significantly degrade the audio quality of the program segment (watermark). A reception facility (stream reading unit) is provided to extract the data stream from the recorded audio and compare the stream with reference data for the transmission, including length and time of the segment. Comparison can verify the broadcast (Abstract, Col. 2, lines 37-55). The combination step is done through an inverse conversion method (Col. 4, line 28 – Col. 5, line 7). Greenberg also discloses a recording (writing) and storage apparatus for the audio stream (Col. 2, lines 44-46). Greenberg does not disclose using a digital to analog converter. Tewfik discloses a method for embedding watermarks into audio wherein a digital to analog converter is utilized (Col. 2, lines 15-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a digital to analog converter in the

Art Unit: 2132

system to encode an audio broadcast of Greenberg in order to increase the robustness of the signal so that embedded data will survive manipulation as taught in Tewfik (Col. 2, lines 33-36).

5. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg, U.S. Patent No. 5,379,345, in view of Linnartz, U.S. Patent No. 6,209,092. Referring to claims 9-12, Greenberg discloses a method of encoding an audio broadcast wherein an audio data stream containing segment identification data (ID flag) is combined with a program segment to which it relates in a manner in which the data is inaudible on conventional reception apparatus (scrambled) and which does not significantly degrade the audio quality of the program segment (watermark). A reception facility (stream reading unit) is provided to extract the data stream from the recorded audio and compare the stream with reference data for the transmission, including length and time of the segment. Comparison can verify the broadcast (Abstract, Col. 2, lines 37-55). The combination step is done through an inverse conversion method (Col. 4, line 28 – Col. 5, line 7). Greenberg also discloses a recording (writing) and storage apparatus for the audio stream (Col. 2, lines 44-46). Greenberg does not disclose having copy or recording permissions distributed with the audio stream. Linnartz discloses a method of transferring content information wherein a copy permissions mark is distributed along with an audio signal and the recorder verifies that it has permission to record the signal before doing so (Col. 3, lines 19-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a copy permissions mark in the system for encoding an audio broadcast of Greenberg in order to provide protection against unauthorized copying as taught by Linnartz (Col. 1, lines 44-65).

Art Unit: 2132

Referring to claims 13-16, Greenberg does not disclose the storage unit being memory on an IC card. Linnartz discloses that the audio signal can be stored (RAM) on an audio card (IC card)(Col. 1, lines 44-46 & Col. 8, lines 18-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the audio signal on an audio card in order to control playback as taught in Linnartz.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cox, U.S. Patent No. 5,848,155.

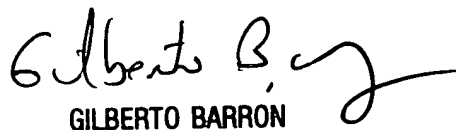
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 703-305-7684. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703)305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Benjamin E. Lanier
August 6, 2003



GILBERTO BARRON
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